

# Graduate School positions in cardiovascular research - University of Mississippi

We are looking for students interested in pursuing a Ph.D. investigating the mysteries of cardiovascular development and disease in zebrafish

Our research seeks to investigate the fundamental question of how cardiac cells sense and respond to the environment during development and disease. Focusing on tissue interactions we seek to understand the mechanisms underlying the regulation of morphogenic and identity transformations that occur during development and disease. We use the assembly of the heart tube in zebrafish as our model with which to elucidate these mechanisms. Some of the specific research questions we are interested in investigating include, but are not restricted to: how multiple tissues interact to regulate large movements? How intercellular adhesions are tuned during collective movements? How lumen formation is intrinsically and extrinsically encoded? and How the plasticity of cardiovascular identity is regulated? These challenging questions require we take an interdisciplinary approach, combining the genetic and imaging strengths of zebrafish with both biomechanical and systems-level methodologies.

Are these the type of difficult challenges that excite you? We are recruiting graduate students to join our laboratory. Contact Josh directly at [josh@olemiss.edu](mailto:josh@olemiss.edu).

-More information about the laboratory can also be found at [joshuabloomekatz.wordpress.com](http://joshuabloomekatz.wordpress.com).

-For more information about our graduate program including rotations please see [biology.olemiss.edu](http://biology.olemiss.edu)